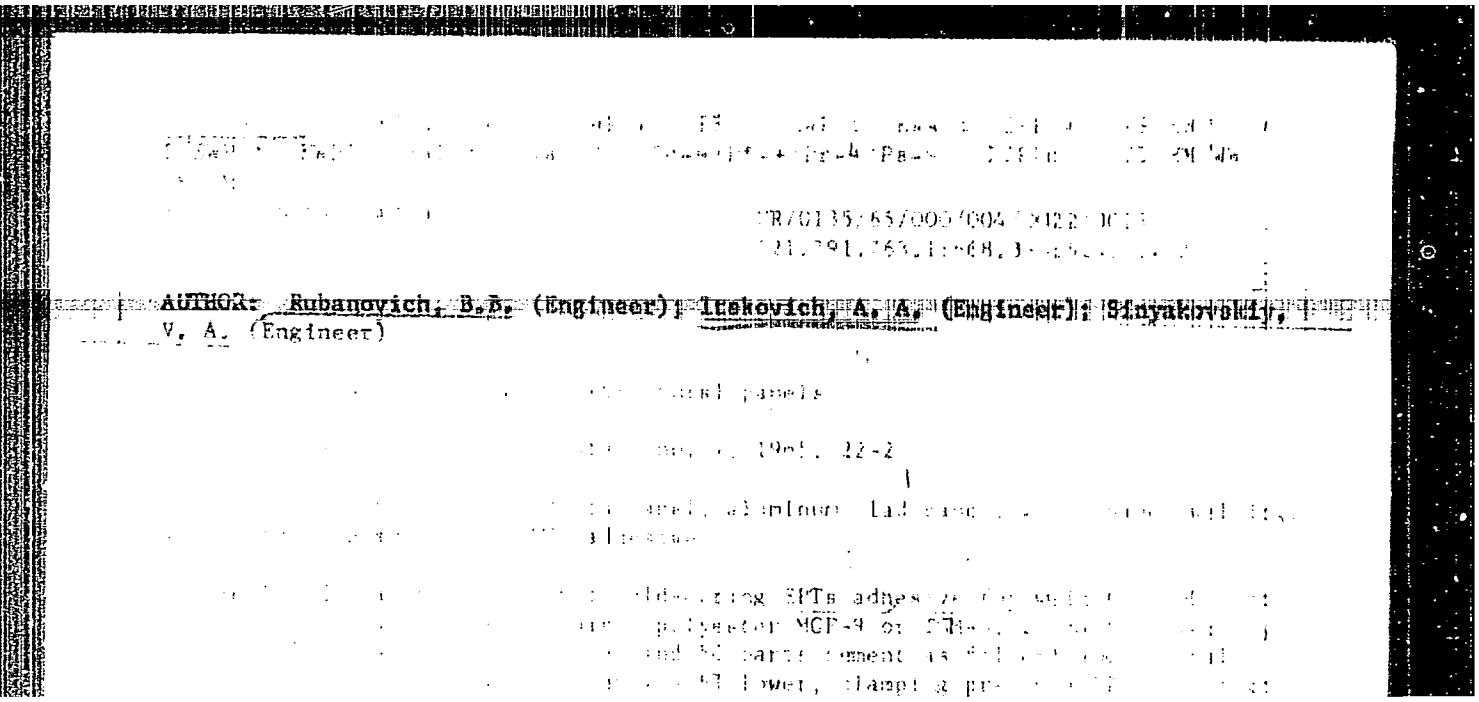


AUTHOR: Rubanovich, B. B. (Engineer); Trokovich, A. A. (Engineer); Shyakovoli, V. A. (Engineer)

panels were 50% higher than without the adhesive. Orig. art. has: 4 figures and 2 tables.

Card 1/2

ASSOCIATION: TsNIISK Gosstroyn SSSR

SUBMITTED: 00 ENCL: 00 SUB CODE: IE, MT

OTHER: 000

RUBANOVICH, B.B., inzh.; ITSKOVICH, A.A., inzh.; SINYAKOVSKIY, V.A., inzh.

Spot welding over glue of structural elements. Svar. proizv. no.4:22-25 Ap '65. (MIRA 18:6)

1. TSentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy Gosstroya SSSR.

L 2299-66 EWP(e)/EWT(m)/EPF(c)/EWP(i)/EWP(v)/EWP(j)/T/EWP(t)/EWP(k)/EWI(b)/EWA(c) JD/WW/HM/RM/WH

ACCESSION NR: AP5020166 UR/0135/65/000/008/0033/0034

621.791.039

AUTHORS: Itskovich, A. A. (Engineer); Sinyakovskiy, V. A. (Engineer); Rubanovich, B. B. (Engineer)

TITLE: Apparatus for preparation of aluminum alloy surfaces for adhesive-welded connections

SOURCE: Svarochnoye proizvodstvo, no. 8, 1965, 33-34

TOPIC TAGS: metal bonding, welding, adhesive bonding, surface finish, surface preparation

ABSTRACT: Since bonded joint quality depends to a large extent on the preparation of the bonded surfaces, an optimum chemical or mechanical surface preparation method should be used for each bonding method. For mechanical surface preparation small steel wire brushes (wire diameter 0.2 mm, outside diameter 100 mm, inside diameter 30-40 mm, width 8-15 mm, speed 1200-3000 rpm) are recommended for best results. The authors developed a simple apparatus for cleaning large construction parts (up to 6 m long) at a speed of up to 2.5 m/min. It consists of a 1 kw, 930 rpm motor with a 250-mm long horizontal pendulum lever pivoted on the motor axis.

Card 1/2

L 2299-66

ACCESSION NR: AP5020166

The end removed from the motor has a bearing-mounted axle driven by V-belts from the motor (2:1 speed increase) on which 2-5 brushes can be mounted. The brushes are held against the work by a damping system consisting of two opposing springs which provide almost constant contact force despite slight irregularities of the work piece. The surface produced is evaluated at 2-60 μohms for welding. The aluminum dust should be removed from the surface by brushing or with alcohol (acetone is not acceptable). Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MM, IE

NO REF SOV: 000 OTHER: 000

Card 2/2

ITSKOVICH, A.A., inzh.

Shear testing by torsion of welded and glued and welded spot joints. Svar. proizv. no.9:35-36 S '65. (MIRA 18:9)

1. TSentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy im. V.A.Kucherenko Gosstroya SSSR.

[illegible]VICH, A.A., inzh.; RUBANOVICH, B.B., inzh.; [illegible], V.A., inzh.

Welded glue joints in structural elements. Prom. stroi. 42 no. 6: 35-38 '65 (MIRA 18:12)

1. Tsentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy Gosstroya SSSR.

NABIYEV, M.N., akademik; ZAKRZHEVSKAYA, A.V.; ITSKOVICH, A.M.

Crystallization of a complex nitric-phosphate fertilizer. Uzb. khim. zhur. no.1:3-10 '61. (MIRA 14:1)

1. Institut khimii AN UzSSR. 2. Akademiya nauk UzSSR (for Nabiyev).
(Fertilizers and manures)

SERGOVANTSEV, V.T., kand.tekhn.nauk; YURASOV, V.V., kand.tekhn.nauk; ALUKER, Sh.M., kand.tekhn.nauk; ANDRIANOV, V.N., doktor tekhn. nauk; ASTAF'YEV, N.N., kand.tekhn.nauk; BUDZKO, I.A., akademik; BYSTRITSKIY, D.N., kand.tekhn.nauk; VEYALIS, B.S., kand.tekhn. nauk; GIRSHBERG, V.V., inzh.; GORSHKOV, Ye.M., inzh.; GRICHEVSKIY, E.Ya., inzh.; ZAKHARIN, A.G., doktor tekhn.nauk; ZLATKOVSKIY, A.P., kand.tekhn.nauk; IOSIPYAN, S.G., inzh.; ITSKOVICH, A.M., dotsent; KAUFMAN, B.M., inzh.; KVITKO, M.N., inzh.; KORSHUNOV, A.P., inzh.; LEVIN, M.S., kand.tekhn.nauk; LOBANOV, V.N., dotsent; LITVINENKO, A.F., inzh.; MERKKLOV, G.F., inzh.; PIRKHAVKA, P.Ya., kand.tekhn.nauk; PRONNIKOVA, M.I., kand.tekhn.nauk; SMIRNOV, B.V., kand.tekhn.nauk; FATYUSHENKO, S.G., inzh.; KHODNEV, V.V., inzh.; SHCHATS, Ye.L., kand.tekhn.nauk; EBIN, L.Ye., doktor tekhn.nauk; ENTIN, I.A., kand.tekhn.nauk; SILIN, V.S., red.; SMELYANSKIY, V.A., red.; BALLOD, A.I., tekhn.red.; SMIRNOVA, Ye.A., tekhn.red.

[Handbook pertaining to the production and distribution of electricity in agriculture] Spravochnik po proizvodstvu i raspredeleniiu elektricheskoi energii v sel'skom khoziaistve. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 900 p. (MIRA 13:2)

1.Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Budzko).
(Rural electrification)

ITSKOVICH, Aleksandr Mikhaylovich; YEGORKINA, L.I., redaktor; MATVEYEVA, Ye.N., tekhnicheskiy redaktor; EL'KIND, V.D., tekhnicheskiy redaktor

[Technical thermodynamics] Tekhnicheskaia termodinamika. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1957. 191 p.
(Thermodynamics) (MLRA 10:7)

ITSKOVICH, Aleksandr Mikhaylovich; BAUMAN, I.M., red.; TIKHANOV, A.Ya., tekhn.red.

[Low-pressure boiler installations] Kotel'nye ustanovki maloi moshchnosti. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 226 p. (MIRA 11:8)
(Boilers)

KAMINSKIY, D.M., kand. tekhn. nauk; MYL'NIKOV, V.A., inzh.; ITSKOVICH, A.M., inzh.; BURLAK, S.T., inzh.; LEONT'YEV, F.Ye., inzh.

Use of semiconductor rectifiers in underground traction substations. Izv. vys. uchob. zav.; gor. zhur. 6 no.8:180-182 '63. (MIRA 16:10)

1. Sibirskiy metallurgicheskiy institut (for Kaminskiy, Myl'nikov, Itskovich).

ITSKOVICH, E.L., inzhener; LOSHCHINSKAYA, A.V., inzhener; MIKHAYLOV, S.P., inzhener.

Gas sampling device for OMD-49 and GMUK-21 gas analyzers. Tsement 22 no.3:17-19 My-Je '56. (MLRA 9:8)
(Gases--Analysis) (Waste products)

SOV/112-58-2-2512

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1958, Nr 2, pp 115-116 (USSR)

AUTHOR: Itskovich, E. L.

TITLE: A Thermomagnetic Oxygen Gas Analyzer (Termomagnitnyy gazoanalizator na kislorod)

PERIODICAL: V sb.: Teploenerg. pribory i regulyatory, M.-L., Mashgiz, 1956, pp 195-201

ABSTRACT: An instrument for measuring the oxygen concentration in flue gases is described. It is designed on the principle of thermomagnetic convection. The instrument comprises a receiver, a gas sampler, and a supply pack consisting of a ferroresonance stabilizer with a selenium rectifier and a barretter. The receiver consists of a thermostatic section which houses a magnetic system and a measuring chamber. The measuring chamber includes four identical tungsten 30-micron wire heaters wound on a mica plate. To stabilize the sensitive elements, and to protect them against any aggressive influence of the gas, the heater winding is covered with a thin layer of glass by a hot-pressing

Card 1/2

A Thermomagnetic Oxygen Gas Analyzer

method. All four heaters are connected in a Wheatstone bridge circuit, two opposite arms being located directly under the magnetic poles, and the two other arms being located in identical geometrical situations outside the magnetic field. Such a heater arrangement permits canceling the influence of the receiver slope upon the instrument reading. A 17-mv electron potentiometer with a scale calibrated in oxygen percentage serves as the measuring instrument of the gas analyzer. Scale zero checking and setting are done with a built-in millivoltmeter. To obtain a no-oxygen gas mixture, the gas being analyzed is passed through an electric furnace with fine-grained charcoal. The few instruments constructed have the following characteristics: measurement range 0 to 5% O_2; permissible zero uncertainty 0.2% O_2; main error 5% of the range, or 0.25% O_2. A gas sampler secures normal operation of the instrument with the following gas parameters at the sampling point: temperature 150°-600° C; dust content up to 50 g/m^3; rarefaction up to 130 mm of water column.

L.V.I.

Card 2/2

ITSKOVICH, E.L.

101-4-1/13

SUBJECT: USSR/Automatic Control

AUTHOR: Itskovich, E.L., Engineer

TITLE: Automatic Control of Gas-Heated Rotary Kilns (Avtomaticheskoye regulirovaniye vrashayushcheysya pechi, rabotayushchey na gazoobraznom toplive)

PERIODICAL: Tsement , 1957, # 4, pp 1-10 (USSR)

ABSTRACT: A method for the construction of an automatic control system for rotary kilns was designed and approved by the Laboratories for Automation of Thermal Processes "TsPKBA" of the "SOYUZTEPLOKONTROL". The main task was to keep the output parameters within pre-set limits, and to maintain constant burning temperatures and constant feeding of the kiln. Indirect indicators were designed by special experiments for the technological output parameters. The indirect indications are measured with the following automatic devices: oxygen contents in the exhaust gases by means of a "ТМГК-5" thermomagnetic gas analyzer; temperature of the exhaust gases - by thermocouples; the weight of 1 liter of clinker of a certain fraction - by a special automatic device which takes samples every 5 minutes, and weighs them on scales equipped with an induction

Card 1/4

TITLE: Automatic Control of Gas-Heated Rotary Kilns (Avtomaticheskoye regulirovaniye vrachayushcheysya pechi, rabotayushchey na gasoobraznom toplive)

transmitter. The experiments have shown that all control measures affect all, or the majority of parameters simultaneously and in approximately equal intensity. One of the output parameters - indicating the quality of clinkers - has such a delayed action (30 min) that a direct incorporation into the control system is not possible. The aforementioned properties required to find intermediate parameters, as well as complicated outside connections between the control systems. In order to facilitate this task, the work was approached in 2 stages:

1. Automatic stabilization of the operation of the furnace;
2. Automatic maintenance of output parameters within the set limits, and stabilizing them on the new level until arrival of the corrective impulse. Experiments lead to the conclusion that the stabilization operations of a rotary kiln should be based on those parameters which govern the burning of clinkers, and not on the stabilization of thermo-technical parameters which do not directly influence the technological process. Flow charts were designed to control the speed of kiln rotation

TITLE: Automatic Control of Gas-Heated Rotary Kilns (Avtomaticheskoye regulirovaniye vrashayushcheysya pechi, rabotayushchey na gazoobraznom toplive)

under simultaneous synchronization of the burning temperature with the speed of feeding. The quality of the flow chart can be gauged by changes occuring in output parameters, since the first stage of the work is the reduction of such vacillations in these parameters. The fundamental requirements for the control system were:

1. Reduced interference with the control process of the kiln.
2. Changing of an output parameter to the standard of range has to be performed in such a way as to effect only minor value changes in the other parameters. Tests conducted in the Leningrad Cement Factory in Aug 56 proved the efficient automatic control of output parameters, i.e. the control actions remained within the intended limits.

The article contains 1 table, 3 figures, 3 diagrams. There are 15 references, 3 of which are Slavic (Russian)

Card 3/4

101-4-1/13

TITLE: Automatic Control of Gas-Heated Rotary Kilns (Avtomaticheskoye regulirovaniye vrashayushcheysya pechi, rabotayushcheysya na gazoobraznom toplive)

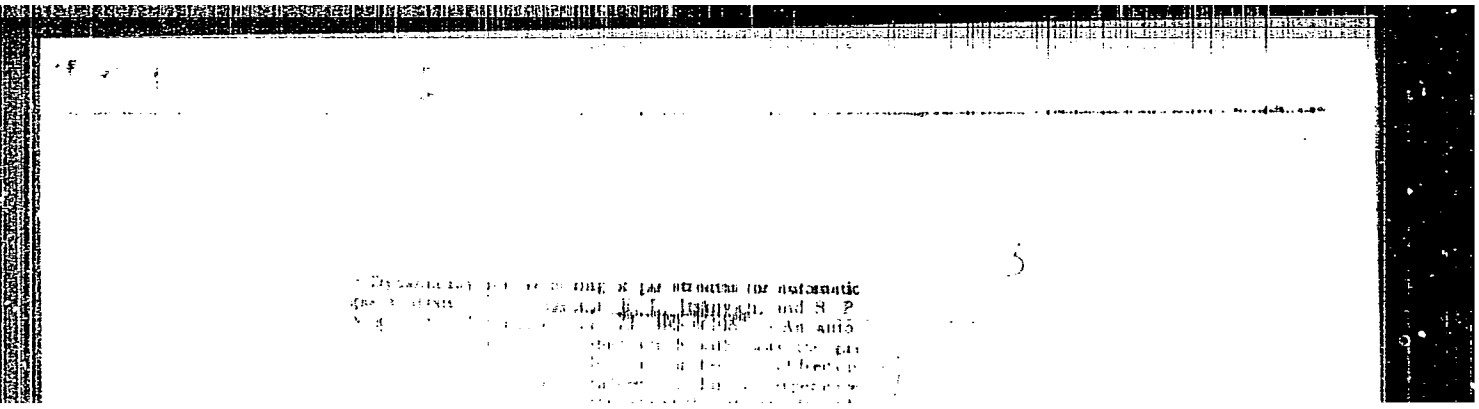
INSTITUTION: Laboratories for Automation of Thermic Processes of the Trust "SOYUZTEPLOKONTROL"

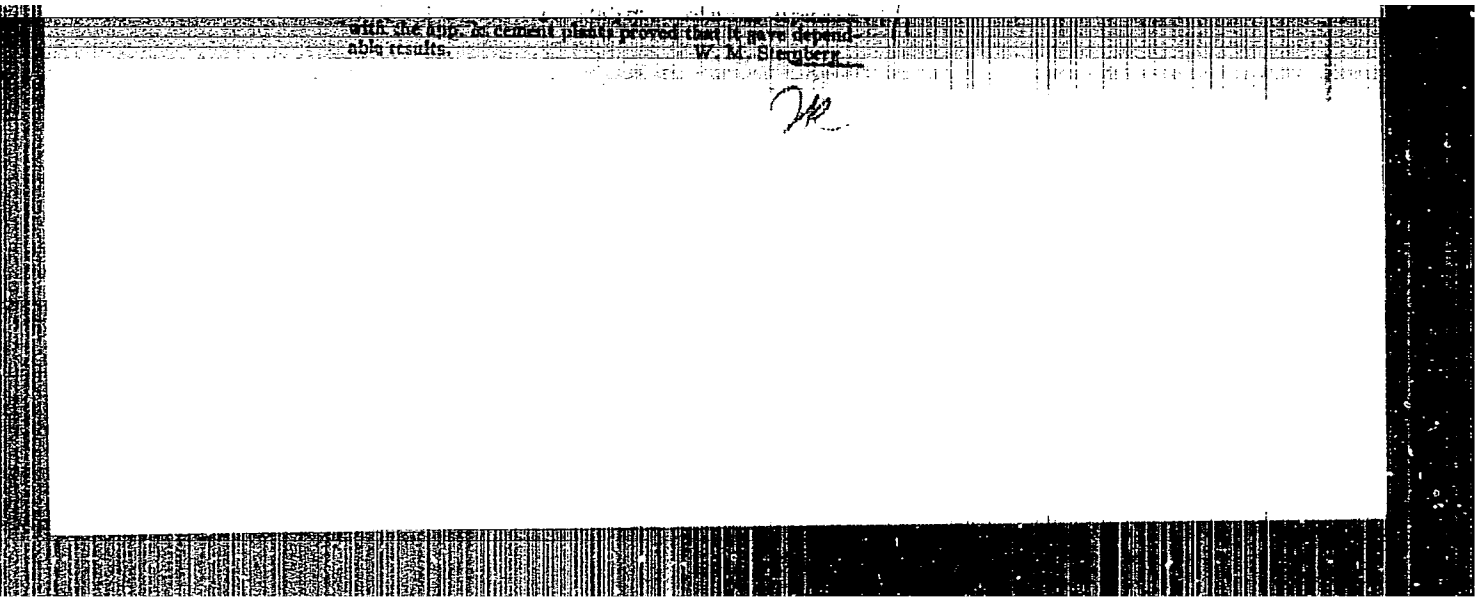
PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress

Card 4/4





32-7-29/49

AUTHORS Ageykin D.I., Itskovich E.L., Vorob'yev I.N. (Deceased)

TITLE New Construction of a Thermomagnetic Gas Analyzer Based Upon Oxygen. (Novaya konstruktsiya termomagnitnogo gazoanalizatora na kislorod--Russian)

PERIODICAL Zavodskaya Laboratoriya, 1957, Vol 23, Nr 7, pp 852-858 (U.S.S.R.)

ABSTRACT This device consists of a principal component (indicator) in which measuring of thermal magnetic convection is carried out, the electric elements being fitted to the interior of the lid. Inside there is a thermostatic cell with a magnetic system and measuring chamber with sensitive elements through which the gas to be analyzed passes. The device has a permanent magnet (made of "magniko" alloy), the magnetic conductor is made of "armko" iron, and the pole points made of "permendur" serve for the maintenance of a maximum field voltage. The magnetic system has "gabarites" having a great stability of magnetic field voltage as well as a hermetically closed chamber the interior of which is coated with lead. The indicator possesses two sensitive elements in the measuring chamber each having two heaters as extensions of the magnetic bridge. Here the position of the sensitive elements as well as that of the heater are fixed in proportion to the magnetic pole. By an increase of the oxygen content of the gas mixture thermomagnetic convection is increased. By means of this device it is thus possible to determine the number of oxygen molecules in the gas volume unit of the measuring chamber. In this way also partial pressure is determined.

Card 1/2

New Construction of a Thermomagnetic Gas Analyzer Based Upon Oxygen. 32-7-29/49

There are no Illustrations.

ASSOCIATION Institute of Automation and Telemechanics, AN USSR.
(Institut avtomatiki i telemekhaniki Akademii nauk SSSR.)

AVAILABLE Library of Congress.

Card 2/2

ITSKOVICH, E. L.: Master Tech Sci (diss) -- "Synthesis of a system of automatic regulation of the process of roasting cement clinker in a rotary furnace using gaseous fuel". Moscow, 1958. 17 pp (Acad Sci USSR, Inst of Automatics and Telemechanics), 185 copies (KL, No 4, 1959, 126)

ITSKOVICH, Emmanuil L'vovich, LOSHCHINSKAYA, Anna Valer'yanovna,; LEGHTENKOV, A.I., nauchnyy red.; TYUTYUNIK, M.S., red.; GILENSON, P.G., tekhn. red.

[Automatic control in the burning of cement clinker] Avtomaticheskii kontrol' obzhiga tsementnogo klinkera. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1958. 48 p. (MIRA 11:10)
(Cement kilns)
(Automatic control)

AUTHORS: Itskovich, E. L. and Loshchinskaya, A. V. 101-58-3-2/12

TITLE: Graduation of Gas Analyzers on CO_2 Based on the Measurement of Heat Conductivity of the Mixture, for Rotary Furnaces (Graduirovka gazoanalizatorov na CO_2, osnovannykh na izmerenii teploprovodnosti smesi, dlya vrashchayushcheysya pechi)

PERIODICAL: Tsement, 1958, 24 (Nr 3, pp 1-6 (USSR)

ABSTRACT: The article deals with the use of electrical gas analyzers of the GED-49 and GEUK-21 type to analyze waste gases from cement roasting rotary furnaces. They operate on the basis of measuring the heat conductivity of gas mixtures and require an adjustment in the graduation if used for determining the CO_2 content in waste gases from rotary furnaces. To carry out such alterations, a testing arrangement is recommended as shown in diagram 4. There are 2 diagrams, 1 table, 2 graphs and 1 Soviet reference.

Card 1/1 1. Gas--Waste--Analysis 2. Gas analyzers--Applications 3. Gas analyzers--Operation

15(6)

SOV/101-59-2-3/13

AUTHOR: Itskovich, E.L.

TITLE: Automatic Control of the Specific Heat Consumption for the Calcination Process in the Rotary Kiln

PERIODICAL: Tsement, 1959, Nr 2, pp 6-12 (USSR)

ABSTRACT: The author states that an automatic computation device has been designed, to show the amount of the specific fuel consumption at any desired moment. Practical adaptation of such a device at the rotary kiln will permit the optimum operating conditions of the working kiln. The author also states that the instantaneous heat consumption can also be estimated by means of an analysis of the escaping gases. For this purpose, the gases undergo a splitting into their components, such as oxygen, carbonic acid and combustion constituents. Calculation of the specific consumption of heat, based on the characteristics of raw material, fuel, process conditions, and analysis of escaping gases, are presented in a book written by Ye. I. Khodorov, "Pechi

Card 1/5

Automatic Control of the Specific Heat Consumption for the Calcination Process in the Rotary Kiln

tsementnoy promyshlennosti", Ch. II. ("Furnaces of the cement industry", part II). The author quotes the basic equation of combustion, occurring under conditions of an incomplete burning and excess of air:

$$CO_2^T + \mu CO^T + O_2^T = 20.9 - \beta CO_2^T \qquad (1)$$

where CO_2^T, CO^T and O_2^T are the components of smoke gas of any fuel, and β are the carbon-dioxide characteristics.

The author reproduces in sequence, the full chemical calculation, illustrating the continuity of the combustion process. The above calculation contains several variable coefficients, the value of which depends upon the actual production conditions. In connection with such inavoidable irregularity, the author refers to the methodical errors due to the oscillations in the coefficient values

Automatic Control of the Specific Heat Consumption for the Calcination Process in the Rotary Kiln

determined at the Novorossiyskiy tsementnyy zavod "Oktyabr'"(Novorossiysk Cement Plant "Oktyabr'") and at the Leningradskiy tsementnyy zavod (Leningrad Cement Plant) employing Stavropol' gas of a stable composition, and artificial shale gas of a variable consistency. Figure 1 shows the recalculation graph giving the correction factor for the definition of "q", which symbolizes the specific heat consumption. This calculation is also valid for kilns on powdered coal fuel. But, in this case, the correctness of the calculation will suffer due to the inconsistency of this fuel. On the basis of the above method, an automatic computer has been designed, producing continuously mathematic calculations relating to the concentration of components of the escaping gases, such as O_2, CO_2 and CO. Figure 2 shows the basic scheme of the computing device, giving the specific consumption of fuel

Automatic Control of the Specific Heat Consumption for the Calcination Process in the Rotary Kiln

for the calcination purposes. The device consists of four types of "EPD" or "EPV" electron potentiometers. Three of them are secondary devices, corresponding to the gas analyzers, and show values of O_2, CO_2 and CO, in the escaping gases, and the fourth directly indicates the specific consumption of heat used for calcination purposes. The resistor-type transmitters R_1, R''_2, R'''_2, and R_4, connected into the electric bridge, change their resistances in proportion to the position of the hand of the corresponding potentiometer, i.e. in proportion to the concentration of the definite component of the escaping gases. Calculation of the full resistances of all resistor-type transmitters permits to determine all coefficients of the proportionality. In the capacity of transmitters - the automatic gas analyzers may also be used, indicating O_2, CO_2 and CO H_2, adapted in the installation of the UGT-2

Card 4/5

Automatic Control of the Specific Heat Consumption for the Calcination Process in the Rotary Kiln

(Ural Geological Trust-2), issued by the "Sevzapmontazh-avtomatika" for the rotary kilns. The laboratory for automatization of thermal processes "SPKBA" of the "Sevzapmontazhavtomatika" trust has performed comparative experiments with one rotary kiln at the Leningrad Cement Plant. Comparison between the amounts of specific fuel consumption, obtained by a direct measurement of the consumed gas fuel and weight of the produced clinker, and the amount calculated from the indications, is given by the gas analyzers, in the installation of the Ural Geological Trust-2. Figure 3 shows part of the obtained registration. The author concludes that the use of the apparatus for a continuous indication of the specific consumption of heat for calcination, with a degree of correctness of 6%, will help in the appreciation of the economical factors, influencing the process of calcination and of the process itself. There are 2 graphs and 1 diagram.

15(6)

SOV/119-59-10-1/19

AUTHOR: Itskovich, E. L., Candidate of Technical Sciences

TITLE: A Synthesis of the Automatic Control Circuit of a Rotary Cement Kiln

PERIODICAL: Priborostroyeniye, 1959, Nr 10, pp 1-6 (USSR)

ABSTRACT: In the introduction, the dimensions of rotary kilns with recuperative coolers intended for the burning of cement clinker are presented. These kilns operate by the "wet" method. Accordingly, the cylinders are 2.5-4 m wide, 40-150 m long, their inclination is 3-5°, and they usually rotate with 1 rpm. The charge passes from the cold to the hot end within 2.5-4 h. The furnace gases flow in a direction opposite to that of the charge. Further, details of the air current in the furnace and recuperator are given. The individual zones in which the various physical and chemical variations of the material take place, are also discussed. The author indicates that it is necessary to maintain the charge at certain temperatures to guarantee first quality of the furnace products. All processes in the furnace are controlled by five devices: 1) One for regulating heat consumption; 2) one for regulating the consumption of primary air; 3) a speed-regulating device;

Card 1/3

A Synthesis of the Automatic Control Circuit of a Rotary Cement Kiln

4) one for regulating slime consumption; 5) one for regulating the consumption of secondary air. No precise automatic control of the motions within the furnace and no data on the influence exercised by the various factors upon the mode of operation of the heat zones have been made available as yet for design. The characteristic mode of operation of the individual unit parts was indirectly investigated by experiments in which the discharge data and temperature conditions in the furnace were determined by means of numerous temperature indicators. The experiments were made by the Laboratory for Automation of Thermal Processes of the "Sevzapmontazhavtomatika" Trust on Industry Furnace Nr 2 of the Leningradskiy tsementnyy zavod imeni Vorovskogo (Leningrad Cement Factory imeni Vorovskiy). The static and dynamic properties of the main items are summarized in table 1. The variation of these items with time appears to be a steady and ergodic random function if the items variations in normal operation occur within certain limits. This allows for the estimation of the eigenfunction and the intercorrelation function of the items. Herefrom it followed that the weight per liter of clinker cannot be regulated by changing the supply of heat. From the further investigation

A Synthesis of the Automatic Control Circuit of a Rotary Cement Kiln

the author concluded that the weight per liter of clinker can be regulated by changing the temperature within the zone of clinkering. A control device designed for this purpose guarantees the required quality of clinker, as shown by experiments. It proved to be necessary to stabilize the wetness at the end of the drying zone. This was attained by regulating the temperature of the emanating gases. The temperature of the emanating gases was regulated by changing the supply of secondary air. The oxygen content of these gases is regulated by changing the supply of heat and secondary air. In conclusion, the author discusses the consequences resulting from a variation in the number of revolutions and primary air supply. The control circuit developed here was realized in the form of a universal regulator in the rotary furnace mentioned in the introduction. Experiments have proved the exactness of the method of synthesis of a control circuit applied here. There are 6 figures and 1 table.

ITSKOVICH, E.L.

PHASE I BOOK EXPLOITATION SOV/4411

Konferentsiya po voprosam teorii i primeneniya diskretnykh avtomaticheskikh sistem, Moscow, 1958

Teoriya i primeneniye diskretnykh avtomaticheskikh sistem; trudy konferentsii (Theory and Application of Discrete Automatic Systems; Transactions of the Conference) - Moscow, AN SSSR, 1960. 572 p. 5,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Natsional'nyy komitet SSSR po avtomaticheskomu upravleniyu. Institut avtomatiki i telemekhaniki.

Editorial Board: M.A. Gavrilov, Doctor of Technical Sciences, Yu.V. Dolgolenko, Doctor of Technical Sciences, V.A. Kotel'nikov, Candidate of Technical Sciences, A.Ya. Lerner, Doctor of Technical Sciences, I.S. Kordsanov (Scientific Secretary), G.S. Pospelov, Doctor of Technical Sciences, A.A. Fel'dbaum, Doctor of Technical Sciences, A.V. Khramoy, Candidate of Technical Sciences, and Ya.Z. Tsypkin, Doctor of Technical Sciences; Resp. Ed.: Ya.Z. Tsypkin, Doctor of Technical Sciences; Ed. of Publishing House: M.L. Podgoyetskiy; Tech. Ed.: S.G. Markovich.

PURPOSE: These transactions are intended for the members of the conference and other specialists in automatic control.

COVERAGE: The Conference on the Problems of Theory and Application of Discrete Automatic Systems took place in Moscow from September 22 to 26, 1958. It was the first conference devoted to discussions of the present status of the theory and techniques of discrete automatic systems and to planning for future development. The papers discussed at the conference have been divided into four groups. In the first group optimization switching circuits are discussed as well as methods of relay control systems, in particular plant lag control systems in which are realized optimal processes as to quick response. The second group of papers is devoted to the analysis and synthesis of pulse systems with variable parameters, of pulse systems with several pulse components, to the study of self-oscillation phenomena in nonlinear pulse systems, and to the methods of calculating linear pulse systems. Problems of simulating pulse systems and descriptions of some pulse regulators have also been included. The third group of papers deals with digital systems. Problems of using elements of digital technique and digital computers for the automation of various fields of engineering, i.e., power engineering, mining, radio communication, metallurgy, etc., are discussed. Problems of analog-digital conversion and vice versa as well as problems of developing specialized functional converters have been included in this group. The fourth group of papers includes theoretical elements and certain practical applications of the simplest types of self-adjusting systems, optimalizing control systems, which are developed as relay, pulse and digital devices. Here are also found papers describing various methods of investigating steady state conditions in optimalizing systems, results of studying the effects of random factors on the process of automatic scanning, and examples of existing optimalizing control systems. Some of the more interesting communications and observations made during the discussion of the various conference papers have also been included in the Transactions. Personalities and references accompany most of the papers.

PHASE I BOOK EXPLOITATION SOV/5528

Drabkin, G. S., I. P. Brovar, Ya. Ye. Gel'fand, and E. L. Itskovich

Avtomatizatsiya tsementnykh zavodov (Automation of Cement Plants) Leningrad, Gosstroyizdat, 1961. 399 p. Errata slip inserted. 4,000 copies printed.

Scientific Ed.: A. I. Leontenkov, Engineer; Ed. of Publishing House: A. S. Rotenberg; Tech. Ed.: L. V. Voronetskaya.

PURPOSE: This book is intended for technical personnel of cement plants and design and planning offices.

COVERAGE: Descriptions are given of the technical characteristics of instruments, devices, and circuits of automatic monitoring, control, and regulation systems used in manufacturing processes at cement plants. Prospects for the development of complex automation of the main manufacturing processes in cement plants are reviewed. Chs. I, III, VI-IX, and XIV were written by I. P. Brovar and G. S. Drabkin; Chs. II, V, and X-XII, by Ya. Ye. Gel'fand; and Chs. IV, XIII, and Sec. 16 of Ch. V, by E. L.

Card 1/8

Automation of Cement Plants SOV/5528

Tsikovich. There are 30 references: 27 Soviet (including 1 translation), 2 English, and 1 German.

TABLE OF CONTENTS:

Card 2/8

S/103/61/022/002/007/015
B019/B060

16.9500 (1031, 1121, 1132)

AUTHOR: Itskovich, E. L. (Moscow)

TITLE: Determination of necessary repetitions of measurements in discrete controls

PERIODICAL: Avtomatika i telemekhanika, v. 22, no. 2, 1961, 216-223

TEXT: In studies having the purpose of automatizing technical objects the determination of the frequency at which certain quantities are measured plays an important part. At first, the results of some laboratory measurements under different operational conditions will be the only data available. In the study made here the quantities to be controlled are assumed to be continuous random functions of time. All such functions as characterize continuous processes in technical objects practically belong to this class of quantities. In the author's opinion, the following factors should be taken into account when determining the frequency of measurements in the control of technical processes: 1) Initial data for the solution of the problem concerned should be available. These initial data can be obtained by continuous recording and determination of the mean

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values in suitable time intervals. 2) The character of the function which is used for the approximation of a steadily changing quantity. In most cases, this will be a step function, and the approximation error must be taken into account when selecting the necessary frequency of measurements. 3) The demands made as to the accuracy of measurements must be taken into account. Such demands depend upon the type of effect a change of the quantities has upon the course of the process in the object. It is shown that the measured quantities can be classified into two groups according to the demands made as to their accuracy. The error of the measured quantities of the first group must not at any instant exceed a certain given value. A mean square error is given for the measured quantities of the other group. In the discrete control of quantities belonging to the first group the accuracy of measurements can be determined as follows: (a) If the spectral density of the quantity to be controlled is known, the accuracy of measurement can be determined by:

$$N_1 \leq \omega_c |y_{max}(t)| \; /(\delta - \delta_\eta) \qquad (7)$$

Here, N_1 denotes the frequency of measurement, ω_c is the frequency of the cross section of the spectral density y(t), δ is the admissible error of measurement, and δ_Π is the instrumental error. In the absence of initial data it is necessary to carry out specific tests in which the changes taking place with time in the quantities to be controlled are studied. In the discrete control of quantities belonging to the second group the accuracy of measurements will be determined from: (a) if the correlation functions of the functions to be controlled are known, by formula $N_2 = 1/h_2$ (10), where h_2 is the time between two adjoining measurements and is determined with the correlation functions. (δ) if initial data are not available, it will be necessary here as well to make an analysis of specific measurement values. S. N. Bernshteyn and V. N. Khlistunov are mentioned. There are 4 figures, 1 table, and 2 Soviet-bloc references.

SUBMITTED: July 11, 1960

ITSKOVICH, E.L.

Main trends in the automation of cement manufacture. TSement 28 no.2:8-10 Mr-Ap '62. (MIRA 15:8)

1. Institut avtomatiki i telemekhaniki AN SSSR.
(Cement industries) (Automatic control)

S/103/63/024/002/012/020
D201/D308

9,6150

AUTHOR: Itskovich, E.L. (Moscow)

TITLE: Determination of pick-up spacing in the control of space distributed fields

PERIODICAL: Avtomatika i telemekhanika, v. 24, no. 2, 1963, 233-239

13

TEXT: The author considers the problem of automatic determination of the magnitude of a field at any required point by using the least possible number of pick-up[s]. The above problem and that of determining the pick-up spacing [is] considered for the case of control of a field distributed linearly along one coordinate only. The allowable rms measurement error in the field distribution is assumed to be known, the distribution of the field is assumed to be random. The procedure in determining the field consists in determining the statistical field characteristics i.e. in analyzing the random function of the distribution of the given quantity along the given coordinate, the length of the latter being limited by the

Card 1/2

ITSKOVICH, Emmanuil L'vovich; TEYMAN, A.I., red.

[Statistical methods in production automation] Statisticheskie metody pri avtomatizatsii proizvodstva. Moskva, Izd-vo "Energiia," 1964. 189 p. (MIRA 17:6)

ITSKOVICH, E.L.; KONDAKOV, V.F.

Using the model of transient responses in evaluating the object by the recording of values in the process of a regular operation of the unit. Priborostroenie no.7:5-8 Jl '64.

(MIRA 17:11)

TYURKOVICH, E.I. (Moskva)

Calculation of the cumulative indices of production performance of an automatic control system. Avtom. i telem. 26 no.7:1253-1264 Jl '65.
(MIRA 18:8)

CHELYUSTKIN, A.B., red.; ITSKOVICH, E.L., red.; PLISKIN, L.G., red.; RAYZMAN, N.S., red.; CHERNYSHEV, V.N., red.; VOLKOV, V.L., red.; CHADEYEV, V.M., red.

[Automatic operational control of production processes; transactions] Avtomaticheskoe operativnoe upravlenie proizvodstvennymi protsessami; trudy. Moskva, Nauka, 1965. 244 p. (MIRA 18:11)

1. Vsesoyuznaya konferentsiya po avtomaticheskomu operativnomu upravleniyu proizvodstvennymi predpriyatiyami. 1st. Moscow, 1963.

L 10377-67 EWP(k)/EWT(d)/EWP(h)/EWP(1)/EWP(v)
ACC NR: AP7003063 SOURCE CODE: UR/0103/66/000/008/0139/0148

AUTHOR: Itskovich, E. L. (Moscow); Trakhtengerts, E. A. (Moscow) 27

ORG: none

TITLE: Minimization of memory size for a program of centralized production control. Part 1

SOURCE: Avtomatika i telemekhanika, no. 8, 1966, 139-148

TOPIC TAGS: algorithm, computer memory

ABSTRACT: The problem of compiling standard subroutines for realizing a centralized production control algorithm and determination of the volume of information to be processed by these subroutines is stated. A method is analyzed for determining the number of elementary operations required to run a standard subroutine. Orig. art. has: 13 formulas and 1 table. [JPRS: 38,836]

SUB CODE: 09 / SUBM DATE: 26Nov65 / ORIG REF: 004

Card 1/1 JB UDC: 681.142.352.4

112-3-5098

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957, Nr 3, p. 5 (USSR)

AUTHORS: Lifshits, I.M., and Itskovich, F.I.

TITLE: The Kinetics of the Decay of Superconductivity Under the Influence of an Alternating Field (O kinetike razrusheniya sverkhprovodimosti peremennym polem)

PERIODICAL: Uch. zap. Khar'kovsk. un-ta, 1955, vol. 64, pp. 45-57

ABSTRACT: Bibliographic entry.

ASSOCIATION: Khar'kov University (Khar'kovsk. un-t)

Card 1/1

L 45101-66 EWT(l)/EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) JD/AT

ACC NR: AP6024891 SOURCE CODE: UR/0056/66/051/001/0301/0308

AUTHOR: Itskovich, F. I.

ORG: Khar'kov Engineering School for Officers (Khar'kovskoye vyssheye-komandno-inzhenernoye uchilishche)

TITLE: Effective work functions for different types of electron emission from metals

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 51, no. 1, 1966, 301-308

TOPIC TAGS: work function, thermionic emission, photoeffect, thermionics, field emission, ELECTRON EMISSION, PHOTOEFFECT

ABSTRACT: It is shown that for an arbitrary electron dispersion law in metals the effective thermionic emission and surface photoeffect work functions (W_t and W_{ph}) reduced to a zero field may be larger than the true work function W. These quantities may differ from each other and also from the effective work function for field emission W_F. In such a case $W_{ph} \geq W_t \geq W$ and $W_{ph} \geq W_F \geq W$ (all quantities refer to a given surface). If the three reduced effective work functions are equal, they are almost certainly identical with W. The thermionic current for an arbitrary

Card 1/2

L 45101-66

ACC NR: AP6024891

dispersion law is also calculated. The experimental data as a whole are in accordance with the results obtained. Orig. art. has: 16 formulas and 3 figures.

SUB CODE: 20/ SUBM DATE: 15Feb66/ ORIG REF: 008/ OTH REF: 006

Card 2/2 blg

ICKOVICH, F.I.

AUTHOR: ZIL'BERMAN,G.E., ICKOVIČ,F.I. PA - 2078

TITLE: Temperature Dependence of the Magnetic Susceptibility of Electrons in Metals. (Temperaturnaja zavisimost' magnitnoge vospriimčivosti elektronov v metalle, Russian).

PERIODICAL: Zhurnal Eksperimental'noi i Teoret.Fiziki, 1957, Vol 32, Nr 1, pp 158-160 (U.S.S.R.)

Received: 3 / 1957 Reviewed: 4 / 1957

ABSTRACT: The authors investigated the temperature dependence of the magnetic susceptibility χ of electrons within a wide temperature interval in weak magnetic fields, when χ practically does not depend on H. Here the following cases are investigated:
1) Only small electron groups exist.
2) Furthermore, also great electron groups exist.
3) In addition, great hole groups exist.
Computations are carried out here on the assumption of a quadratic dispersion law, taking into account the spin-paramagnetism and the anisotropy of effective masses.
Hexagonal bismuth crystals are investigated (results in the case of other symmetry types remain qualitatively unchanged). Furthermore, as usual, the existence of three homogeneous small ellipsoid-like groups is assumed. The axes of these ellipsoids form angles of 120° in the plane of the binary axis.

Card 1/3

Temperature Dependence of the Magnetic Susceptibility of Electrons in Metals.

Case I: For the components χ_i (the index 3 here denotes the principal axis) of the 3 aforementioned groups computations furnish the expression:

$$\chi_i = -(1/2)\,AB_i\,(kT)^{1/2}\,F_{-1/2}(\zeta/kT) = -AB_i\sqrt{\zeta_o}\,X.$$

Also the quantities occurring in this formula are given explicitly. For the dependence of the chemical potential ζ on temperature the following formula is obtained from the condition of constancy of the concentration n of electrons:

$\Theta = \left[(3/2)F_{1/2}(u)\right]^{-2/3}$. After computation of the function $F_{+1/2}$, $X(\Theta)$ is determined, i.e. the required dependence $\chi(T)$ in universal coordinates, and, furthermore, $\zeta(\Theta)/\zeta_o$. For limiting cases (extensive degeneration as well as validity of BOLTZMANN'S statistics) the following relations are found:

$T \ll T_o$: $X = 1 - \pi^2\Theta^2/12$, $\zeta/\zeta_o = 1 - \pi^2\Theta^2/12$;

$T \gg T_o$: $X = 2/3\,\Theta$ $\zeta/\zeta_\Theta = (3/2)\Theta \ln\left[(16/9\pi)^{1/3}\,\Theta^{-1}\right]$.

Card 2/3

PA - 2078

Temperature Dependence of the Magnetic Susceptibility of Electrons in Metals.

The curves for $X(\Theta)$ and $\int(\Theta)/\int_0$ as well as for their asymptotic expressions are demonstrated in a diagram. Such a temperature dependence of χ applies in the very case of the series of metals.
Case 2) and 3) are dealt with in a similar manner and the equations obtained are given explicitly as under 1).

ASSOCIATION: Not given
PRESENTED BY:
SUBMITTED:
AVAILABLE: Library of Congress

Card 3/3

24.2120

68193

SOV/58-59-5-10999

Translation from: Referativnyy Zhurnal Fizika, 1959, Nr 5, p 156 (USSR)

AUTHORS: Zil'berman, G.Ye., Itskovich, F.I.

TITLE: On the Thermodynamics of an Electron Gas Under an Arbitrary Dispersion Law

PERIODICAL: Tr. Khar'kovsk. politekhn. in-ta, 1958, Vol 14, pp 133 - 140

ABSTRACT: The authors calculate some thermodynamic functions for the case of an arbitrary law of dispersion of the electrons in a metal. The crossover method adopted to calculate the statistical sums requires the fulfilment of conditions coinciding with the criteria of the quasi-classical description. For the square law of dispersion these conditions are strictly satisfied, but not, generally speaking, in the case of the arbitrary dispersion law; as a result the expressions obtained in this study bear an approximate character. The authors calculate the heat capacity of the electron gas in the presence of a magnetic field. That part of the heat capacity which depends on the magnetic field is connected with the concrete form of the dispersion law, while the part not dependent on the field is obtained for the arbitrary dispersion law. The heat

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On the Thermodynamics of an Electron Gas Under an Arbitrary Dispersion Law

capacity oscillates as a function of the magnetic field, but most of the oscillating terms mutually cancel out, whereas the corresponding terms in the expression for the magnetic moment are retained. Consequently the magnetic-field dependence of the heat capacity turns out to be a relatively weaker effect than the De Haas - van Alfven effect.

A.A. Filyukov

ITSKOVICH, F.I.

Effect of the quantization of the energy of particles in a finite volume on the thermodynamic values of a Fermi gas. Izv.vys.ucheb. zav.; fiz. no.2:13-23 '61. (MIRA 14:7)
(Electron gas) (Quantum statistics)

ACCESSION NR: AP4025924 S/0056/64/046/003/0913/0919

AUTHOR: Gogadze, G. A.; Itskovich, F. I.; Kulik, I. O.

TITLE: Quantum oscillations of cold-emission current of metals in a magnetic field

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 46, no. 3, 1964, 913-919

TOPIC TAGS: cold emission, field emission, tunnel current, tunnel current oscillation, chemical potential, number of electronic states, complex cathode emission

ABSTRACT: Following an earlier study of the oscillations of the tunnel current between two metals separated by a thin layer of dielectric, which yielded a more accurate determination of the effective mass and which showed that the tunnel-current oscillations depend significantly on the oscillations of the chemical potential of the metals, the authors investigate theoretically the oscillations of the field-emission current from a metal in a magnetic field prependicular to the sample surface. The oscillations are shown to be due either to oscillations

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ACCESSION NR: AP4025924

in the number of the electronic states in the magnetic field or to oscillations of the chemical potential of the metal, the latter having usually an appreciable amplitude and the former being significant only for metals having small electron groups. As an example, the features are considered of field emission from a complex cathode consisting of two metals separated by a thin layer of dielectric, through which tunnel current can flow. It is shown that a considerable current can exist even in a relatively weak field incapable of inducing appreciable emission from one of the metals (in the absence of a potential difference between metals). The field-emission current exhibits oscillations associated with both metals. It is pointed out that an experimental investigation of these oscillations is extremely difficult. Orig. art. has: 4 figures and 16 formulas.

ASSOCIATION: Fiziko-tekhnicheskiy institut nizkikh temperatur AN UkrSSR (Physicotechnical Institute of Low Temperatures, AN UkrSSR); Khar'kovskoye vy*sheye komandno-inzhenernoye uchilishche (Khar'kov Engineer Officers' College).

SUBMITTED: 27Jul63 DATE ACQ: 16Apr64 ENCL: 00

SUB CODE: PH, GE NR REF SOV: 009 OTHER: 001

Card 2/2

L 34390-66 EWT(1)

ACC NR: AP6018823 SOURCE CODE: UR/0056/66/050/005/1425/1437

AUTHOR: Itskovich, F. I.

ORG: Kharkov Higher Command Engineering School (Khar'kovskoye vyssheye komandno-inzhenernoye uchilishche)

TITLE: Theory of field emission from metals

SOURCE: Zh eksper i teor fiz, v. 50, no. 5, 1966, 1425-1437

TOPIC TAGS: metal crystal, free electron, electron emission, electron spectrum, field emission

ABSTRACT: The field emission from a metal single crystal has been investigated for an arbitrary electron dispersion law. The formula for the free electron theory holds true for the cold emission (accurate to a preexponential factor) if the Fermi surface is intersected by an axis pz perpendicular to the emitting surface of the sample. Otherwise, the law of the tangential quasi-momentum of an electron emitted from the metal leads to the replacement of the work function w in the exponent by a larger quantity W. The distance between the Fermi surface and axis p_z can be estimated from the difference W—w, which yields definite information concerning the electron spectrum of the metal.

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L 34390-66

ACC NR: AP6018823

The author thanks I. M. Lifshits and M. Ya. Azbel for their discussions, and G. Ye. Zil'berman and I. O. Kulik for their interest in this work and valuable discussions. Orig. art. has: 8 figures and 21 formulas. [Based on author's abstract] [NT]

SUB CODE: 20/ SUBM DATE: 22Dec65/ ORIG REF: 003/ OTH REF: 003

Card 2/2

MITINSKIY, Arseniy Nikolayevich; MOVNIN, M.S. Prinimal uchastiye: IZRAYELIT, A.B., ITSKOVICH, G.M., inzh., nauchnyy red.; SHAURAK, Ye.N., red.; LEVOCHKINA, L.I., tekhn.red.

[Strength of materials] Soprotivlenie materialov. Pod-gotovleno k izdaniiu M.S.Movninym. Leningrad, Gos.soiuznoe izd-vo sudostroit.promyshl., 1959. 294 p. (MIRA 12:5)
(Strength of materials)

DARKOV, A.V., prof., doktor tekhn.nauk; MITROPOL'SKIY, N.M., prof., dokt.tekhn.nauk; SHPIRO, G.S., kand.tekhn.nauk; DIDOV, B.V., prof., retsenzent; BYCHKOV, P.G., dotsent, retsenzent; ITSKOVICH, G.M., nauchnyy red.; ANOSHINA, K.I., red.izd-va; TITOVA, L.L., tekhn. red.

[Strength of materials] Soprotivlenie materialov. Moskva, Gos. izd-vo "Vysshaia shkola," 1959. 741 p. (MIRA 13:4)
(Strength of materials)

KRAVCHENKO, Petr Yefimovich, kand.tekhn.nauk; MILOVIDOV, S.S., prof., retsenzent; ITSKOVICH, G.M., inzh., retsenzent; RABINOVICH, S.V., red.; ANOSHINA, K.I., red.izd-va; SHLYK, M.D., tekhn.red.

[Fatigue strength] Ustalostnaia prochnost'. Moskva, Gos.izd-vo "Vysshaia shkola," 1960. 103 p. (MIRA 13:5)
(Metals--Fatigue)

ITSKOVICH, Georgiy Mayerovich; MAKUSHIN, V.M., dotsent, kand.tekhn.nauk, retsenzent; LYZHENKOV, A.A., inzh., retsenzent; RABINOVICH, S.V., dotsent, kand.tekhn.nauk, nauchnyy red.; LIPKINA, T.G., red.izd-va; YEZHOVA, L.L., tekhn.red.

[Strength of materials] Soprotivlenie materialov. Moskva, Gos. izd-vo "Vysshaia shkola," 1960. 529 p. (MIRA 14:3)

(Strength of materials)

ITSKOVICH, Georgiy Meyerovich; ARKUSHA, A.I., otv. za vypusk; IGNATOVA, T.D., red.

[Methods of presenting the topic "Theories of strength" in technical schools] Nekotorye voprosy metodiki izlozheniia temy "Teorii prochnosti" v tekhnikumakh. Moskva, Upr. kadrov i ucheb. zavedenii. Nauchno-metodicheskii kabinet, 1962. 31 p. (MIRA 15:8)

(Strength of materials)

STOROZHEV, Nikolay Fedorovich; ITSKOVICH, G.M., red.; BELYAK, Yu.L., retsenzent; KAN, P.M., red. izd-va; BODROVA, V.A., tekhn. red.

[Elementary strength calculations of ship structures and mechanisms]Elementarnye raschety prochnosti sudovykh konstruktsii i mekhanizmov; sbornik zadach. Moskva, Izd-vo "Rechnoi transport," 1962. 260 p. (MIRA 15:11)
(Naval architecture--Problems, exercises, etc.)

ITSKOVICH, Georgiy Meyerovich; VINOKUROV, Anatoliy Ivanovich; ROZANOVA, G.K., red.izd-va; GOROKHOVA, S.S., tekhn.red.

[Strength of materials; program and test problems with brief methodological instructions for their completion] Soprotivlenie materialov; programma i zadaniia dlia kontrol'nykh rabot s kratkimi metodicheskimi ukazaniiami po ikh vypolneniiu. Metodicheskoe posobie dlia uchashchikhsia mashinostroitel'nykh spetsial'nostei zaochnykh tekhnikumov na baza 7 i 10 klassov. Izd.7, perer. Moskva, Vysshaia shkola, 1963. 76 p. (MIRA 17:1)

1. Russia (1923- U.S.S.R.) Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya.
(Strength of materials)

SLIVCHANSKAYA, V.V.; ITSKOVICH, G.M.; SAUTKIN, N.I.

Characteristics of the structure of a continuous ingot of low-carbon rimmed steel. Stal' 24 no.2:128-131 F '64.

(MIRA 17:9)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii imeni I.P. Bardina.

DARKOV, Anatoliy Vladimirovich, prof., doktor tekhn. nauk; SHPIRO, Geyman Simonovich, kand. tekhn. nauk; Prinimal uchastiye ITSKOVICH, G.M., inzh.

[Strength of materials] Soprotivlenie materialov. Moskva, Vysshaia shkola, 1965. 762 p. (MIRA 18:2)

OBODOVSKIY, Boris Arnol'dovich; KHANIN, Solomon Yefimovich; Prinimali uchastiye ORZHEKHOVSKAYA, O.P.; ITSKOVICH, G.M.; DARKOV, A.V., prof., doktor tekhn. nauk, retsenzent; KRYUKOVSKIY, S.S., prof., retsenzent [deceased]; KRYTOV, G.M., dots., retsenzent; RAKIVNENKO, V.N., st. prepod., retsenzent; VINOKUROV, A.I., otv. red.; VAYNBERG, D.A., red.

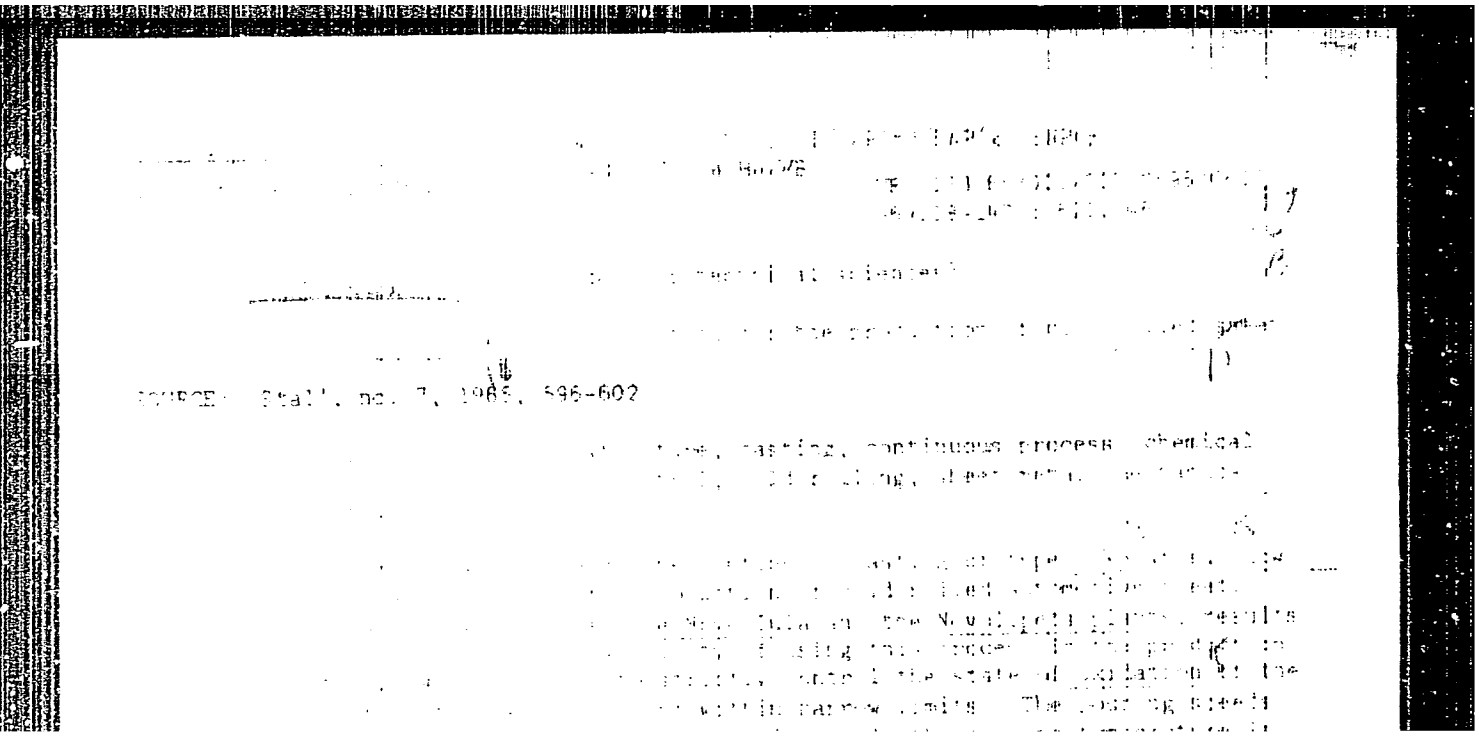
[Strength of materials in examples and problems] Soprotivlenie materialov v primerakh i zadachakh. Khar'kov, Izd-vo Khar'kovskogo gos. univ., 1965. 314 p. (MIRA 18:5)

LYUBOSHITS, Moisey Il'ich; ITSKOVICH, Georgiy Mikhaylovich; TATUR, G.K., doktor tekhn.nauk, retsenzent; BARANOVSKIY, N.V., kand. tekhn. nauk, nauchn. red.; LEVINA, S.G., red.

[Manual on the strength of materials] Spravochnik po soprotivleniiu materialov. Minsk, Vysshaia shkola, 1965. 343 p. (MIRA 18:5)

ITSKOVICH, G.M.; KISELEV, V.A.; CHERNAVSKIY, S.A.; BOBKOV, K.N.; PANICH, B.B.; BAZHENOV, D.V., red.

[Preparation of a course project on machine parts; reference manual] Kursovoe proektirovanie detalei mashin; uchebno-spravochnoe posobie. Izd.4., perer. Moskva, Mashinostroenie 1964. 594 p. (MIRA 18:5)



[redacted]

melt and to maintain the oxygen content within narrow limits. The pouring speeds were kept within the limits of 0.4 to 0.5 m/min, while the pouring temperature is

[redacted]

L 61915-65

ACCESSION NR: AP5017686 3

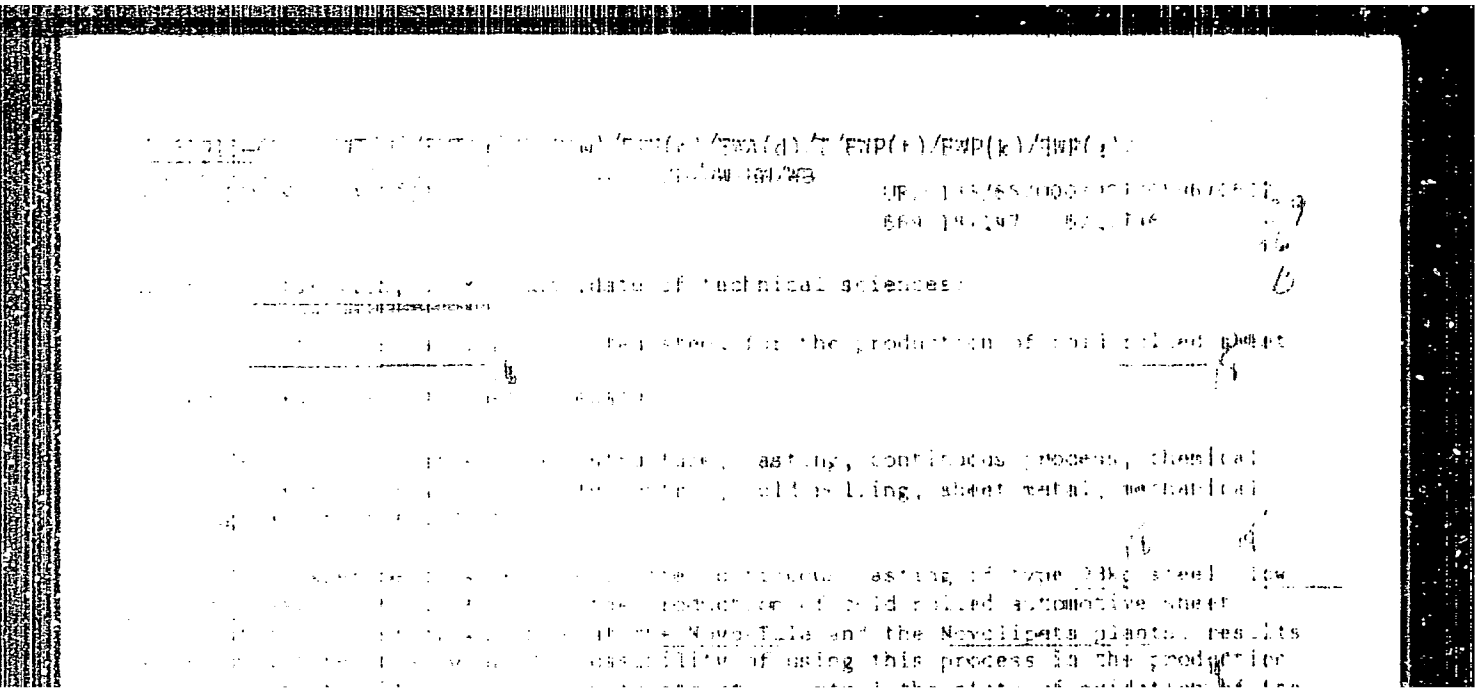
[illegible] ingots are presented, showing the ef- [illegible] on porosity and surface quality. Chemical [illegible] compared [illegible] that of the [illegible] mechanical properties for the [illegible] the leading part of the ingot [illegible] cold rolled sheet [illegible] Stamping experiments were [illegible] the surface appearance of stampings was

found to be very satisfactory in the production of automobile sections. Orig. art. has: 4 figures, 3 tables.

ASSOCIATION: TsNIIChM

ITSKOVICH, Georgiy Mikhaylovich; VINOKUROV, Anatoliy Ivanovich; BARANOVSKIY, Nikolay Vasil'yevich; SHAURAK, Ye.N., red.

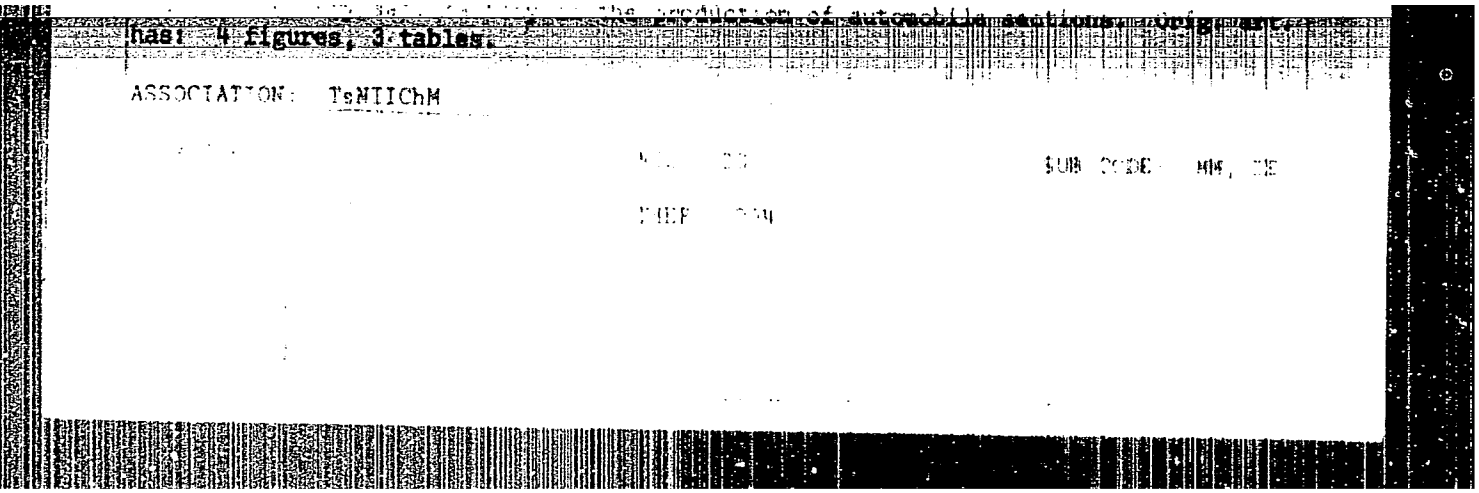
[Collection of problems on the strength of materials] Sbornik zadach po soprotivleniiu materialov. Leningrad, Sudostroenie, 1965. 284 p. (MIRA 18:7)



carbon steel, also to prepare for the production of cold rolled automotive sheet.

The continuous casting was done at the Novo-Tula and the Novolipets plants; results were conclusive in showing the possibility of using this process in the production of [illegible] steel. It is necessary to strictly control the state of oxidation of the [illegible] to keep within narrow limits. The pouring speeds [illegible] m/min, while the pouring temperature is [illegible] control in the production of ingots is very

important, and macrostructures of the finished ingots are presented, showing the ef- [illegible] criteria of porosity and surface quality. Chemical [illegible] ingots is low compared to that of the ordi- [illegible] more uniform mechanical properties for the pro- [illegible] ied, since the leading part of the ingot did [illegible] properties of the cold rolled sheet corresponded to



has: 4 figures, 3 tables.

ASSOCIATION: TsNIIChM

SUB CODE: MM, IE

ITSKOVICH, G. M.

6563 ITSKOVICH, G. M. SOPROTIVLENIYE MATERIALOV. PROGRAMMA, METOD. UKAZANIYA I KONTROL'NYE ZADANIYA. DLYA UCHASHCHIKHSYA ZAOCH. MASHINOSTROIT. TEKHNIKUMOV. M. **SOV. NAUKA**, 1954 120 S. S CHERT. 22SM. (M*VO VYSSH. OBRAZOVANIYA. UPR. SRED. SPETS UCHEB. ZAVEDENIY) 41.000 EKZ. 2R 10 K. --NA OBL. AVT. NE UKAZAN. ** (55-2309) 620.1:539.4(071.4)

SO: KNIZHANYA LETOPIS' NO. 6, 1955

BATURIN, A.T.; ITSKOVICH, G.M., inzhener, nauchnyy redaktor; GLINER,B.M., inzhener, redaktor; KARGANOV, V.G., inzhener, redaktor grafficheskikh rabot; MODEL',B.I., tekhnicheskiy redaktor

[Machine parts] Detali mashin, Izd. 2-e perer. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1954. 423 p. (MLRA 7:8)
(Machinery--Construction)

ITSKOVICH, G. M.

PAVLOV, Ya.M., kandidat tekhnicheskikh nauk, dotsent; ITSKOVICH, G.M., inzhener, retsenzent; POLYAKOV, V.S., kandidat tekhnicheskikh nauk, redaktor; FETISOV, F.I., inzhener, redaktor.

[Machine parts] Detali mashin. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroitel'noi i sudostroitel'noi lit-ry. Moskva, 1954. 480 p. (MLRA 7:7)

1. Leningradskoye otdeleniye Mashgiza. Zavedyuyushchiy redaktsiey (for Fetisov)
(Machinery)

PAVLOV, Yakov Mikhaylovich, kandidat tekhnicheskikh nauk, dotsent; POLYAKOV, V.S., kandidat tekhnicheskikh nauk, redaktor; ITSKOVICH, G.M., inzhener, retsenzent; SIMONOVSKIY, L.Z., redaktor; POL'SKAYA, R.G., tekhnicheskiy redaktor

[Machine parts] Detali mashin. Izd. 2-e, ispr. i dop. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1955. 559 p.
(Machinery--Design) (MLRA 9:4)

ITSKOVICH, G.M.; PANICH, B.B.; YERDAKOV, V.I.; CHERNAVSKIY, S.A., red.; ANOSHINA, K.I., red. izd-va; PAVLOVA, V.A., tekhn. red.

[Engineering mechanics: a program, tasks for control operations, and brief instructions for fulfilling them for instruction engineering students in correspondence schools of technology and their branches] Tekhnicheskaia mekhanika; programma, zadaniia dlia kontrol'nykh rabot i kratkie ukazaniia k ikh vypolneniiu dlia uchashchikhsia stroitel'nykh spetsial'nostei zaochnykh tekhnikumov i otdelenii. Moskva, Gos. izd-vo "Sovetskaia nauka," 1957. 106 p. (MIRA 14:6)

(Building—Study and teaching)

ITSKOVICH, G.M.; KISELEV, V.A.; CHERNAVSKIY, S.A.; BOKOV, K.N.; FAGEL', A.Z., BONCH-OSMOLOVSKIY, M.A.; GRINCHAR, G.N.; CHERNAVSKIY, S.A., kandidat tekhnicheskikh nauk, nauchnyy redaktor; TIKHONOV, A.Ya., tekhnicheskiy redaktor

[Collection of problems and methods of calculating machine parts] Sbornik zadach i primerov rascheta detalei mashin. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1957. 267 p. (MIRA 10:4)
(Machinery--Design)

ITSKOVICH, G.M.

BATURIN, Aleksandr Timofeyevich [deceased]; ITSKOVICH, G.M., inzhener, nauchnyy red.; KARGANOV, V.G., inzhener, red.graficheskikh rabot; UVAROVA, A.F., tekhn.red.

[Machine parts] Detali mashin. Izd. 3-e, perer. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1957. 423 p. (MIRA 10:12)
(Machinery)

ITSKOVICH, G.M.

AUTHORS: Bokov, K.N., Itskovich, G.M., Kiselev, V.A., Chernavskiy, S.A. Call No. TF 230 .K8

TITLE: Undergraduate Course in Design of Machine Elements. (Kursovoye proyektirovaniye detaley mashin) (Uchebno--spravochnoye posobiye)

PUB. DATA: Gosudarstvennoye nauchno-tekhnicheskoye izdatel'stvo mashinostroitel'noy literatury, Moscow, 1957, 2d ed. rev., 503 pp., 25,000 copies

ORIG. AGENCY: None given

EDITORS: Ed of Publishing House: Krylov, V.I., Engr.; Science Ed.: Itskovich, G.M., Engr.; Tech. Editors: Tikhanov, A.Ya., and Sokolova, T.F.; Corrector: Matisen, V.G.

PURPOSE: This book is approved by the Administration of Special Secondary Educational Institutions, Ministry of Higher Education of the USSR, as a text for technical schools.

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Undergraduate Course in Design of Machine Elements. (Cont.) Call No. TF 230 .K8

COVERAGE: The book is stated to contain the basic data and instructions for designing the drive mechanisms which are the standard subjects of study in courses in machine design at USSR technical schools. Typical design problems and calculations are given. The authors stress the importance of conducting student examinations in basically the same way as that in which students defending theses are examined. Chapter XIV was written with the assistance of Bonch-Osmolovskiy, M.A., Candidate of Technical Sciences, and Grinchar, G.N., Candidate of Technical Sciences. There are 34 references, all USSR.

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Undergraduate Course in Design of Machine Elements (Cont.) Call No. TF 230 .K8

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Undergraduate Course in Design of Machine Elements. (Cont.)

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Undergraduate Course in Design of Machine Elements. (Cont.)

Call No. TF 230 .K8

Undergraduate Course in Design of Machine Elements. (Cont.)

Card 8/10

Undergraduate Course in Design of Machine Elements. (Cont.)

Examples of How to Design Drive Mechanisms

PAVLOV, Yakov Mikhaylovich, dotsent, kand.tekhn.nauk; ITSKOVICH, G.M., inzh., retsenzent; POLYAKOV, V.S., dotsent, kand.tekhn.nauk, red.; SIMONOVSKIY, M.Z., red.izd.; POL'SKAYA, R.G., tekhn.red.

[Machine parts] Detali mashin. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry, 1958. 511 p. (MIRA 12:3)
(Machinery--Design)

ITSKOVICH, G.M.; KISELEV, V.A.; CHERNAVSKIY, S.A., kand.tekhn.nauk; BOKOV, K.N.; FAGEL', A.Z.; BONCH-OSMOLOVSKIY, M.A.; GRINCHAR, G.N.; EL'KIND, V.D., tekhn.red.

[Collected problems and exercises of design for the course on machine parts] Sbornik zadach i primerov rascheta po kursu detalei mashin. Izd.2-e, perer. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry, 1959. 330 p. (MIRA 13:10)
(Mechanical engineering--Problems, exercises, etc.)

ITSKOVICH, G.M.

PHASE I BOOK EXPLOITATION SOV/3453

Chernavskiy, Sergey Aleksandrovich, Georgiy Mikhaylovich Itskovich, Vyacheslav Aleksandrovich Kiselev, Kirill Nikolayevich Bokov, Mikhail Aleksandrovich Bonch-Osmolovskiy, and Boris Pavlovich Kozintsov

Proyektirovaniye mekhanicheskikh peredach; uchebno-spravochnoye posobiye po kursovomu proyektirovaniyu detaley mashin (Designing of Mechanical Drives; Text and Handbook On Machine Parts Designing) Moscow, Mashgiz, 1959. 740 p. 80,000 copies printed.

Scientific Ed.: S.A. Chernavskiy; Ed. of Publishing House: N.Yu. Blagosklonova, Engineer; Tech. Ed.: A.Ya. Tikhanov; Managing Ed. for Information Literature: I.M. Monastyrskiy, Engineer.

PURPOSE: This manual is intended for students in higher engineering schools.

COVERAGE: This book describes the basic principles of the kinematic design of drives with a consideration of economy

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